

Main information	Name of subject, code and the number of credits	DSN 417 Ergonomics, 6 ECTS
	Department	Architecture and design department
	Program (bachelors, master)	Bachelors
	Academic semester	Fall semester of the 2024/2025 academic year
	Teacher	Leyla Huseynova PhD student
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	Telephone:	
	Lecture Room/Table	Neftchiler campus,
	Counseling hours	At times agreed upon with students
Prerequisites	-	
Language of instruction	English	
Type of subject (compulsory, elective)	Selection	
Lessons and additional literature	<ol style="list-style-type: none"> Teaching of ergonomics in the design environment V.F. Runge, Y.P. Manusevich. Moscow. "Architecture - S". 2008 Ergonomics and Labor Processes, Z.A. Malayev, Azerbaijan State University of Economics, Ministry of Education of the Republic of Azerbaijan. Baku-2018. Advances in Ergonomics In Design, Usability & Special Populations Part II. 20014. Ergonomics and Design A Reference Guide. 2006 Allsteel Inc. 	
Course outline	<p>"Ergonomics" is a scientific discipline that studies the functional capabilities of a person in the work and household processes, and distinguishes the requirements for creating optimal conditions for useful life activity and highly productive work.</p> <p>This subject is designed to familiarize students with the essence, purpose and tasks of the science of ergonomics, the essence of an activity that studies the human factor.</p> <p>The basic function of ergonomics is to increase performance by improving employee health and occupational safety by ensuring that the work organization is arranged in accordance with the physical and psychological characteristics of people so that people can work efficiently, healthily and safely in the workplace.</p> <p>The aim of ergonomics is to improve the design of products, systems and environments in order to optimize their safety, efficiency and usability for humans. Ergonomics aims to ensure that tools, equipment and environments are designed to suit the needs and abilities of the people who will use them.</p>	
Course objectives	"Ergonomics" is a scientific discipline that studies the functional capabilities of a person in the work and household processes, and distinguishes the	

	<p>requirements for creating optimal conditions for useful life activity and highly productive work.</p> <p>This subject is designed to familiarize students with the essence, purpose and tasks of the science of ergonomics, the essence of an activity that studies the human factor.</p> <p>The basic function of ergonomics is to increase performance by improving employee health and occupational safety by ensuring that the work organization is arranged in accordance with the physical and psychological characteristics of people so that people can work efficiently, healthily and safely in the workplace.</p> <p>The aim of ergonomics is to improve the design of products, systems and environments in order to optimize their safety, efficiency and usability for humans. Ergonomics aims to ensure that tools, equipment and environments are designed to suit the needs and abilities of the people who will use them.</p>		
Results of teaching	<p>In the process of general teaching of the subject, students:</p> <p>they should know:</p> <ul style="list-style-type: none"> • Perception of the methodological basis of ergonomics; • Assimilation of general information on ergonomic design; • “Perception of human-machine-muhit” connection; • Interactions with external and internal connections in the system “human-machine-environment”; • To perform ergonomic analysis; • Ergonomic normative rules; • Use of ergonomic norms in the field of design and architecture; <p>they should be able to:</p> <ul style="list-style-type: none"> • Understand the ergonomic security of design and architecture projects, the factors that combine ergonomics and design, and the development of joint activities; • The concept of the work environment, works, their classification and the interaction of elements, as well as the structure of the object and the shape and structure of the object, understand the method of determining the ratio of static and dynamic dimensions of the human figure and technical device; <p>They should also be able to analyze the organization of the work environment, including data reflection tools, visual information systems, light-color solution at production facilities, environmental factors;</p>		
Teaching methods	Analysis of a practical issue		+
	Group discussion		+
	Practical tasks		+
Evaluation	Components	History/last term	Percent (%)
	Attendance		5
	Assignment		15
	Midterm exam		30
	Activity		15

	Final exam		35
	Final		100
Rules (Teaching policy and behavior)	<p>Presentation Lectures on Principles of design will be given by the subject teacher, and lectures and assignments will be processed in relevant design programs. Tasks will be performed based on the selected topic. In addition to discussing the solution of the tasks with the teacher, the students will also put their theoretical knowledge into practice. Students will present their individual projects at the end of the course. It will be evaluated in the midterm (30 points) and final (35 points) exam. The project must be submitted by the student. The purpose of this assignment is to teach future designers the skills of presenting, doing a little research in a short period of time, and designing. The presentation must be submitted during the months of September and October before the midterm exam. No additional time is allowed to submit after the last week of classes. Note: In accordance with the purpose of the subject, the projects must be prepared individually by the student in a graphic design program, without plagiarism. Homework assigned to the student will be checked each lesson and 1 point will be given for each completed task. At the end of the semester, this will be evaluated as a minimum of 0 and a maximum of 15 points. Exception: If the student informed the dean of the faculty in advance that he/she will not be able to participate in the handover phase of the work due to valid reasons (related to family situation and health), or if he/she has submitted any related document (application or reference), only in this case the student will be able to attend after the deadline. can hand over the work. Attendance: The maximum score for class attendance is 5 points. The number of points is based on: if the student attends all classes in the subject during the semester, he is given 5 points. If the total number of lessons missed during the semester for the subject exceeds the prescribed limit of 25% (illness, family situation, etc.), the student is not admitted to the exam session and a certain decision is made about him. Exams: The mid-term exam will be held on subjects taught in September and October (after the project is handed over), and the final exam will be held on subjects taught in November and December (after the project is handed over). The procedure for completing the subject. The student's knowledge is evaluated with a maximum of 100 points. An overall success rate of 60% and above is considered to complete the course. A student with a deficit can take this subject again in the next semester or the next year. Rules of conduct of the student. A student is not allowed to violate the University's internal disciplinary rules</p>		

and use a mobile phone. It is forbidden to violate the educational process and ethical rules during the lesson. Unauthorized discussions between students are also prohibited during class.

Chart

Week	History	Topics of the subject	Lessons/Tasks
1.		Basics of ergonomics.	Presentation №1
2.		Incense stages of ecognomics. Excerpt from the field. The effect is the study of the region.	Presentation №2
3.		Excerpt of ergomics. Amiles who set ergonomic requirements. Issues that ensure the coagulation of the insect in the mammary environment. Lightning-complex as the object of the ergonomic analiz. Technician Lightning. Ring shades and insect yard activity in a mega-environment. The effect of race and light on the gavrasms of Mecca volumes.	Presentation №3
4.		Expropriation requirements.	Presentation №4
5.		Ergonomics and supply of different types of environments.	Presentation №5
6.		Dynamics of form in composition Design a dynamic composition based on simple features; Establishment of volume composition based on simple features;	Presentation №6 Repetition and discussion of topics.
7.		Midterm exam	
8.		Tasks of ergodesign in environmental design. Ergonomic program of living environment design. The main equipment elements that ensure the completeness of the environment. Ergonomic requirements for furniture. Habitat equipment. The object complex of the living environment. Ergonomic assessment of kitchen equipment. Bathroom equipment. Designing the environment for the child.	Presentation №7-8
9.		Furnishing of interiors of public buildings. Organization of the workplace and arrangement of furniture in the office.	Presentation №9

		Equipping school and pre-school institutions with equipment. Supply of healthcare institutions.	
10.		Ergonomics of the living environment of the elderly and disabled. Ability to work. Types and causes of disability. Ergonomics requirements for the urban environment, taking into account the needs of the elderly and the disabled. Organization of a comfortable environment for disabled children.	Presentation №10
11.		Ergonomic aspects of environment design and perception. Visual environment and vision physiology.	Presentation №11
12.		Ergonomics of perception of environmental objects and systems. Interaction of perception and information. The role of "gestalts" in perception processes. Perspective "stereotypes" Visual distortions	Presentation №12
13.		The importance of cognitive psychology for ergonomic design of the environment. Formation of architectural prototypes as a means of environment recognition. Image perception problem in architecture.	Presentation №13
14.		Ergonomics and educational system environment design.	Presentation №14
15.		Differentiation of conditions in the environmental system from the perspective of ergonomic design approach.	Presentation №15 Repetition and discussion of topics.

Təsdiq edir: Dos. Abbasova Ş.A.
Memarlıq və dizayn departamentinin rəhbəri